U. S. DEPARTMENT OF AGRICULTURE • AGRICULTURAL MARKETING SERVICE

# PEANUT GRADING EQUIPMENT

## a progress report



AMS 370


SUCTION UNLOADER

# IMPROVED GRADING EQUIPMENT AIDS MARKETING OF FARMERS' STOCK PEANUTS

- New equipment permits inspectors to draw and grade a larger sample of peanuts -- in less time than was formerly required for a small one.

- Official sample size will be enlarged from 100 grams to 500 grams -- with accuracy more than doubled.

- Farmers will be assured of getting a fair return for their crop, based on quality of product delivered.

- Shellers will be assured of getting the quality of peanuts paid for.

Samples automatically

Eliminates human element

Increases accuracy

OLD

NEW

**SPOUT-TYPE SAMPLER....** This sampler takes the most accurate sample possible automatically, as the peanuts are unloaded at the shelling plant. This type of installation has been adopted for official use in grading.



- Saves labor
- Increases accuracy

**SUCTION-TYPE SAMPLER**...Designed for sampling peanuts before they're unloaded from the farmer's truck, this device will replace the old sampling probe. It works its own way down through the load automatically. It is more accurate, because it samples peanuts uniformly from top to bottom of the load.



Saves time

Increases accuracy

**SAMPLE DIVIDER....** No two men can divide a sample of peanuts by hand in exactly the same way. The sample divider eliminates this source of inaccuracy. Because of the speed with which a sample can be divided, the device makes it possible to draw a larger sample from the farmer's load.

# Facilitates mechanical shelling

**PRE-SIZER**... The pre-sizer makes possible a faster, better, mechanical shelling operation. It separates the peanuts in the sample into three different sizes, which correspond to the three different-sized grates in the sheller.

NEW


## Shells 500 grams in 3 minutes vs. 12 min. to hand-shell 100 gms.

**SHELLER....** Hand shelling the samples is one of the serious bottlenecks in grading farmers' stock peanuts. The mechanical sheller is 20 times as fast, eliminating this bottleneck and permitting the use of larger samples with a resulting increase in accuracy.

# Eliminates human element
# Gives greater uniformity



**MECHANICAL SCREEN SHAKER....**Separates peanut kernels of different sizes. Its mechanical operation sizes each sample in the same manner, eliminating the human error present in hand screening.

# It takes 4 minutes to machine-split 500 grams or hand-split 100 grams.

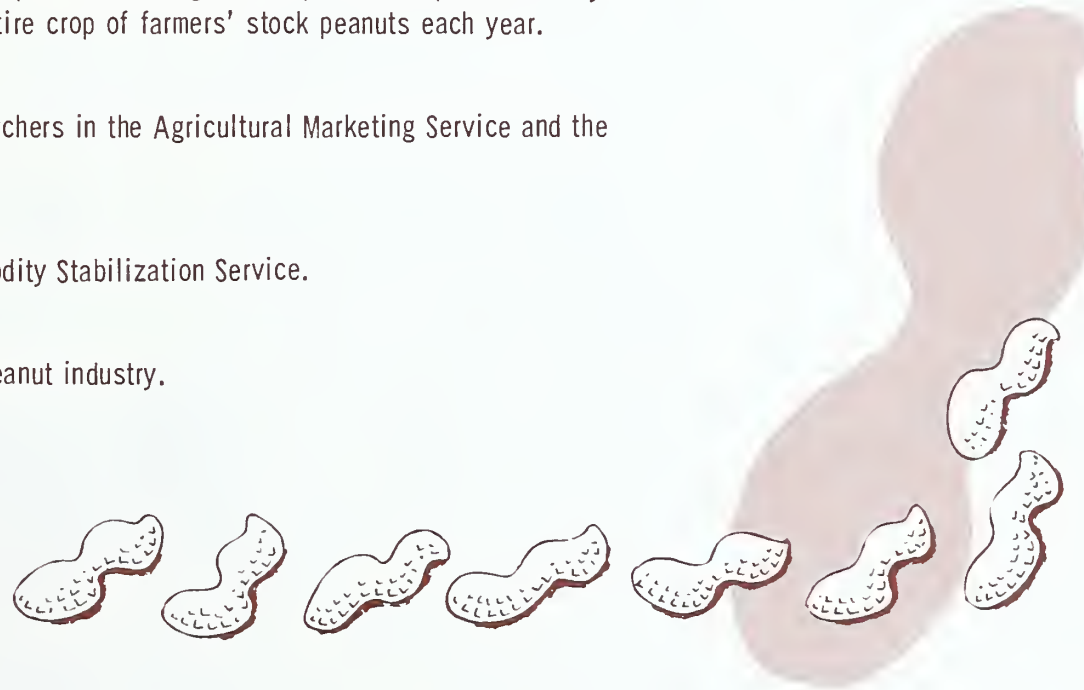
OLD

NEW

**SPLITTER....** Peanut kernels are split, one by one, and the separated halves drop onto a wire screen conveyor. An air blast turns the halves face up for inspection. A second conveyor turns them over, permitting inspection of the outer surface. This five-times-faster operation helps make it possible to increase accuracy through the use of larger samples.

This equipment, designed to improve the grading of farmers' stock peanuts, was developed through joint efforts of:

- The Federal-State Inspection Service, operated cooperatively by the Agricultural Marketing Service and the State departments of Agriculture, which inspects virtually the entire crop of farmers' stock peanuts each year.
- Researchers in the Agricultural Marketing Service and the States.
- Commodity Stabilization Service.
- The peanut industry.




UNITED STATES DEPARTMENT OF AGRICULTURE
1862
1889